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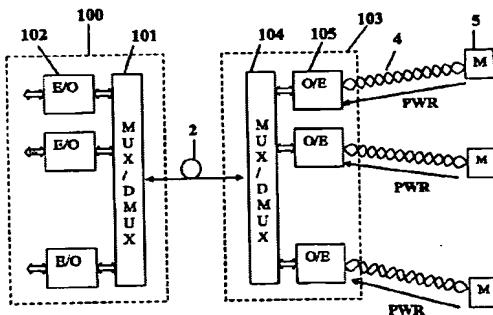
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(54) Title: METHOD FOR ESTABLISHING A SUBSCRIBER CONNECTION AND A SYSTEM UTILIZING THE METHOD



(57) **Abstract:** The objective of the invention is to devise a method for establishing a subscriber connection and a system applying the method. According to the method, a digital subscriber connection consisting of a composition of an optical fiber and a metallic pair cable is implemented by transporting a digital information stream in two directions over an optical fiber (2) between a central site and equipment (103) which is connected to the metallic pair cable (4) of each subscriber. According to the invention, the information streams transmitted and received over the pair cables are multiplexed onto the optical fiber by using a multiplexing method of optical signals, whereby the information streams originating from different subscribers are combined onto the fiber by means of passive optical elements and whereby the information streams transmitted from the central site are distributed to each subscriber-specific optical-to-electric conversion element (105) by means of passive optical elements. Thus the multiplexing and demultiplexing need no active multiplexing/demultiplexing electronics common to all subscribers, but rather the active electronics of the conversion elements (105) of each subscriber operates independently without being dependent on the state of operation of other subscriber's conversion elements. Hence the operating power for said electronics can be fed from the respective subscriber through the subscriber's pair cable.

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